

REMARKS

In the Office Action, the Examiner rejected claims 1-29. By this paper, Applicants cancel claims 14, 15, 22, and 23, add new claims 30-34, and amend claims 1, 6, 8, 11, 18, and 20 for clarification of certain features to expedite allowance of the present application. These amendments do not add any new matter. Upon entry of these amendments, claims 1-13, 16-21, and 24-34 remain pending in the present application and are believed to be in condition for allowance. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Claim Rejections under 35 U.S.C. § 103(a)

In the Office Action, the Examiner has rejected claims 1-29 based on a large number of references in various combinations. As discussed in detail below, Applicants respectfully traverse these rejections.

Specifically, the Examiner formulated the following rejections:

1. The Examiner rejected claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide et al. (U.S. Patent No. 5,652,470, hereinafter "Von der Heide") in view of Yokozawa et al. (U.S. Patent No. 5,650,678, hereinafter "Yokozawa").
2. The Examiner rejected claims 2-4 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Dehmer (U.S. Patent No. 1,755,633, hereinafter "Dehmer").
3. The Examiner rejected claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Bradbury et al. (U.S. Patent No. 6,129,528, hereinafter "Bradbury").
4. The Examiner rejected claims 7 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Harmsen (U.S. Patent No. 5,184,938, hereinafter "Harmsen").

5. The Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Neely et al. (U.S. Patent No. 5,588,804, hereinafter “Neely”).
6. The Examiner rejected claims 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, and 23 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Dehmer, Bradbury, and Harmsen.
7. The Examiner rejected claims 25, 26, and 29 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Herbert (U.S. Patent No. 5,445,215, hereinafter “Herbert”).
8. The Examiner rejected claim 27 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Herbert, Dehmer, Bradbury, and Harmsen.
9. The Examiner rejected claims 12 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Dehmer, Bradbury, and Harmsen and further in view of Seki (U.S. Publication No. 2004/0170501, hereinafter “Seki”).
10. The Examiner rejected claim 28 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Herbert and further in view of Seki.
11. The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Von der Heide in view of Yokozawa and further in view of Dehmer, Bradbury, and Harmsen and further in view of Horng (U.S. Patent No. 398,978, hereinafter “Horng”).

Legal Precedent and Guidelines

The pending claims must be given an interpretation that is reasonable and consistent with the *specification*. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969) (emphasis added); see also *In re Morris*, 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); see also M.P.E.P. §§ 608.01(o) and 2111. Indeed, the specification is “the primary basis for construing the claims.” See *Phillips v. AWH Corp.*, No. 03-1269, -1286, at 13-16 (Fed. Cir. July 12, 2005) (*en banc*).

One should rely *heavily* on the written description for guidance as to the meaning of the claims. *See id.*

Interpretation of the claims must also be consistent with the interpretation that *one of ordinary skill in the art* would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111. “The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation.” *See Collegenet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 75 U.S.P.Q.2d 1733, 1738 (Fed. Cir. 2005) (quoting *Phillips v. AWH Corp.*, 75 U.S.P.Q.2d 1321, 1326). The Federal Circuit has made clear that derivation of a claim term must be based on “usage in the ordinary and accustomed meaning of the words amongst artisans of ordinary skill in the relevant art.” *See id.*

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). In addressing obviousness determinations under 35 U.S.C. § 103, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, No. 04-1350 (April 30, 2007), reaffirmed many of its precedents relating to obviousness including its holding in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *Graham*, the Court set out an objective analysis for applying the statutory language of §103:

Under §103, the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in the pertinent art are to be resolved. Against this background the obviousness or non-obviousness of the subject matter is to be determined. Such secondary considerations as commercial success, long-felt but unresolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *KSR, slip op.* at 2 (citing *Graham*, 383 U.S. at 17-18).

In *KSR*, the Court also reaffirmed that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently,

known in the prior art.” *Id.* at 14. In this regard, the *KSR* court stated that “it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does ... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *Id.* at 14-15. Traditionally, to establish a *prima facie* case of obviousness, the CCPA and the Federal Circuit have required that the prior art not only include all of the claimed elements, but also some teaching, suggestion, or motivation to combine the known elements in the same manner set forth in the claim at issue. *See, e.g., ASC Hospital Systems Inc. v. Montifiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (holding that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination.); *In re Mills*, 16 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 1990) (holding that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination). In *KSR*, the court noted that the demonstration of a teaching, suggestion, or motivation to combine provides a “helpful insight” in determining whether claimed subject matter is obvious. *KSR, slip op.* at 14. However, the court rejected a *rigid* application of the “TSM” test. *Id.* at 11. In this regard, the court stated:

The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and explicit content of issued patents. The diversity of inventive pursuit and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends. *Id.* at 15.

In other words, the *KSR* court rejected a rigid application of the TSM test which requires that a teaching, suggestion or motivation to combine elements in a particular

manner must be explicitly found in the cited prior art. Instead, the *KSR* court favored a more expansive view of the sources of evidence that may be considered in determining an apparent reason to combine known elements by stating:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art all in order to determine whether there was an apparent reason to combine in the known elements in the fashion claimed in the patent at issue. *Id.* at 14.

The *KSR* court also noted that there is not necessarily an inconsistency between the idea underlying the TSM test and the *Graham* analysis, and it further stated that the broader application of the TSM test found in certain Federal Circuit decisions appears to be consistent with *Graham*. *Id.* at 17-18 (citing *DyStar Textilfarben GmbH and Co. v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (2006) (“Our suggestion test is in actuality quite flexible and not only permits but *requires* consideration of common knowledge and common sense”); *Alza Corp. v. Mylan Labs, Inc.*, 464 F.3d 1286, 1291 (2006) (“There is flexibility in our obviousness jurisprudence because a motivation may be found *implicitly* in the prior art. We do not have a rigid test that requires a teaching to combine ... “)).

Furthermore, the *KSR* court did not diminish the requirement for objective evidence of obviousness. *Id.* at 14 (“To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”); see also, *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002) (holding that the factual inquiry whether to combine references must be thorough and searching, and that it must be based on *objective evidence of record*).

When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not, “fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *In re Dembiczak*, F.3d 994, 999, 50 U.S.P.Q.2d 52 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)).

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); *see* M.P.E.P. § 2143.01(VI). If the proposed modification or combination would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); *see* M.P.E.P. § 2143.01(V).

In addition, “it is well established that product claims may include process steps to wholly or partially define the claimed product.” *In re Luck*, 177 U.S.P.Q. 523, 525 (C.C.P.A. 1973). To the extent that “these process limitations distinguish the *product* over the prior art, they must be given the same consideration as traditional product

characteristics.” *Id.* (emphasis in original). These claims are not product-by-process claims. A product-by-process claim defines a product by laying out the method steps required to produce the product. *See Atlantic Thermoplastics Co. Inc. v. Faytex Corp.*, 23 U.S.P.Q.2d 1481, 1490 (Fed. Cir. 1992). This is far different from a mixed limitation or hybrid claim that includes a functional limitation, but does not define the product solely by method steps. The general rule for interpreting hybrid claims is that all limitations are to be given patentable effect. *See In re Angstadt*, 190 U.S.P.Q. 214, 217 (C.C.P.A. 1976).

In order to rely on equivalence as a rational supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant’s disclosure or the mere fact that the components at issue are functional or mechanical equivalents. *In re Ruff*, 256 F.2d 590, 118 U.S.P.Q. 340 (CCPA 1958); *see also* M.P.E.P. § 2144.06.

Missing Features

The cited references, taken alone or in hypothetical combination, fail to teach or suggest features recited by independent claim 1.

Turning to the claims, amended independent claim 1 recites, *inter alia*, “an impeller comprising a hub to house the three-phase DC motor and a plurality of blades extending from the hub, wherein the impeller has an impeller diameter and each blade has a blade height that is at least 25 % of the impeller diameter.” (Emphasis added).

The cited references, taken alone or in hypothetical combination, fail to teach or suggest each blade having a blade height of “at least 25% of the impeller diameter,” as recited by independent claim 1. The Examiner stated that “Yokozawa et al. discloses blades and impeller where the blades are at least 25% of the impeller diameter as seen in figure 1.” Office Action, page 3. The Examiner then marked up a copy of Fig. 1 of Yokozawa with the Examiner’s interpretation of the dimensions shown in Fig. 1. *Id.* However, Applicants note that proportions of features in drawings are not evidence of

actual proportions when the drawings are not to scale. *See* M.P.E.P. § 2125. When the reference does not disclose that the drawings are to scale and is silent as to dimensions, arguments based on measurement of the drawing features are of little value. *See Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, 55 USPQ 2d 1487, 1491 (Fed. Cir. 2000). Here, Yokozawa does not explicitly state that Fig. 1 is to scale nor does it mention actual dimension values. Moreover, Applicants respectfully submit it is more reasonable than not to interpret the blade height in Yokozawa as being consistent with the 20% of impeller diameter value disclosed in Applicants' specification as being the typical blade height in conventional DC motors. *See* Application, paragraph [0028]. Thus, Fig. 1 of Yokozawa does not teach a blade height of at least 25% of the impeller diameter. Also, the secondary references fail to obviate the deficiencies of Yokozawa.

In addition, the present independent claim 1 has been amended to recite, *inter alia*, “a three-phase DC motor comprising a stator and a rotor comprising a rare earth magnet.” (Emphasis added). The hypothetical combination of Von der Heide and Yokozawa does not disclose a three-phase DC motor with a rotor comprising a rare earth magnet. In fact, the Examiner recognized this fact in the Office Action stating that, with respect to dependent claims 16 and 17, “Von der Heide in view of Yokozawa and further in view of Dehmer, Bradbury and Harmsen discloses the claimed invention except for rare earth magnet comprises [sic] of bonded neodymium-iron-born.” Office Action, page 8. Instead, the Examiner relied on the conclusory statement that “[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to make the rotor magnet of bonded neodymium-iron-boron. It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *See* MPEP 2144.04.” *Id.*, pages 8-9. However, this statement is made with absolutely no basis as to why selecting a rare earth magnet to be used with a rotor of the type claimed would have been obvious to one of ordinary skill in the art.

By stating that the use of a rare earth magnet with a rotor of the type claimed is an “obvious design choice,” the Examiner has essentially taken Official Notice of facts outside of the record that the Examiner apparently believes are capable of demonstration as being “well-known” in the art. Therefore, in accordance with M.P.E.P. § 2144.03, Applicants hereby seasonably traverse and challenge the Examiner’s use of Official Notice. Furthermore, Applicants emphasize that the facts asserted by the Examiner are not of a “notorious character” and are clearly not “capable of such instant and unquestionable demonstration as to defy dispute.” See M.P.E.P § 2144.03. Specifically, Applicants respectfully request that the Examiner produce evidence in support of the Examiner’s position as soon as practicable during prosecution and that the Examiner add a reference to the rejection in the next Office Action. If the Examiner finds such a reference and applies it in combination with the presently cited references, Applicants further request that the Examiner specifically identify the portion of the newly cited reference that discloses the allegedly known elements of the instant claim, as discussed above, or withdraw the rejection. If the Examiner relies only on personal knowledge, then Applicants respectfully stress that the Examiner must provide an affidavit or declaration in support of such personal knowledge. See *id.*

In addition, Applicants submit that the Examiner’s use of Official Notice is improper on a legal basis. Section 2144.03 of the Manual of Patent Examining Procedure specifically states:

In certain circumstances where appropriate, an examiner may take official notice of facts not in the record or rely on “common knowledge” in making a rejection, however such rejections should be judiciously applied.

...

Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be “capable of such instant and unquestionable demonstration as to defy

dispute” (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

...

For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. *In re Ahlert*, 424 F.2d at 1091, 165 USPQ at 420-21.

M.P.E.P. (Rev. 6, September 2007) § 2144.03, Pages 2100-145-146. In view of these passages, Applicants reiterate that the Examiner’s use of Official Notice is improper and cannot stand, because the notice of facts are not capable of such instant and unquestionable demonstration as to defy dispute. Therefore, Applicants request the Examiner produce documentary evidence to support the proposition that those of ordinary skill in the art would have found it obvious to use a rotor with a rare earth magnet in a three-phase DC motor in a fan as recited in independent claim 1.

In view of these deficiencies among others, the cited references, taken alone or in hypothetical combination, cannot render obvious the current independent claim 1 and its dependent claims.

The cited references, taken alone or in hypothetical combination, fail to teach or suggest features recited by independent claims 11 and 20.

Amended independent claim 11 recites, *inter alia*, “the stagger angle increases from about 24 degrees to 30 degrees at the hub to about 50 degrees to 56 degrees at the tip; or the camber angle decreases from about 26 degrees to 32 degrees at the hub to about 9 degrees to 15 degrees at the tip; or a combination thereof.” Similarly, amended independent claim 20 recites, *inter alia*, “the stagger angle increases from about 24 degrees to 30 degrees at the base region of the blade to about 50 degrees to 56 degrees at the tip of the blade; or the camber angle decreases from about 26 degrees to 32 degrees at the base region of the blade to about 9 degrees to 15 degrees at the tip of the blade; or a combination thereof.”

The cited references, taken alone or in hypothetical combination, fail to teach or suggest each blade having stagger angles and camber angles which fall within the specific ranges recited in independent claims 11 and 20. Indeed, Von der Heide and Yokozawa are entirely silent on the issue of stagger angle. In fact, the Examiner has apparently relied exclusively on Bradbury as the one reference which discloses the concept of a stagger angle. However, Bradbury only discloses one specific dimensional value for stagger angle at the hub and tip of a blade in claim 12 and Fig. 20. In each of these locations in Bradbury, the stagger angle is characterized as increasing from a value of 41.8 degrees at the hub of a blade to a value of 65.7 degrees at the tip of a blade. There is no mention of stagger angle ranges at either the root or the tip; only discrete values are disclosed. In addition, neither of these discrete values fall within the ranges claimed in independent claims 11 and 20. For instance, 41.8 degrees at the hub does not fall within or even near the range of 24-30 degrees as claimed and 65.7 degrees at the tip does not fall within or even near the range of 50-56 degrees as claimed.

In addition, the Examiner recognized in the Office Action that the cited references fail to disclose the camber angle ranges now recited in independent claims 11 and 20. Specifically, with respect to dependent claim 8, which contains ranges for the camber angle, the Examiner stated:

With respect to claim 8 Von der Heide in view of Yokozawa and further in view of Harmsen teaches the invention except claimed range, however it fails to patentably distinguish over Von der Heide in view of Yokozawa and further in view of Harmsen and would have been within the level of one of ordinary skill in the art at the time the invention was made. It has been held that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), MPEP 2144.05 II.

Office Action, pages 5-6.

However, Applicants contend that the situation discussed in M.P.E.P. § 2144.05 II and *In re Aller* is quite different and, therefore, inapposite. For instance, in *In re Aller*, the prior art reference showed essentially the same chemical process as the recited claims except that the experiment in the prior art reference was conducted at a temperature of 100° C and with a 10% sulphuric acid solution while the claims recited a 25-70% sulphuric acid solution at temperatures of 40-80° C. *See In re Aller*, 105 USPQ at 234. Therefore, in that situation, the prior art reference disclosed workable values. In contrast, in the present situation, the prior art reference discloses only that the camber angle “decreases at an increasing distance from the hub 11.” *See Harmsen*, column 3, lines 32-34. This passage encompasses the entire extent of the disclosure regarding camber angles in Harmsen. Therefore, Harmsen gives no guidance as to what might be appropriate camber angles at the hub or the tip of the blade. It cannot be true that by making such a broad statement, Harmsen has captured the entirety of workable camber angle ranges. In fact, Section 2144.05 of the Manual of Patent Examining Procedure specifically states:

However, if the reference's disclosed range is so broad as to encompass a very large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus. *Id.* See also *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); MPEP § 2144.08.

M.P.E.P. § 2144.05(I).

Applicants contend that in the present situation, by encompassing all of the workable camber angle ranges, the passage made in Harmsen may, at most, be interpreted as claiming a genus whereas independent claims 11 and 20 claim a species. The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness. *In re Baird*, 16 F.3d at 382, 9 USPQ2d at 1552 (“The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious.”). Therefore, the conclusory statement that it “would have been within the level of one of ordinary skill in the art at the time the invention was made” to use the claimed ranges for stagger and

camber angles is insufficient to support a *prima facie* case of obviousness with respect to independent claims 11 and 20.

In view of these deficiencies among others, the cited references, taken alone or in hypothetical combination, cannot render obvious the current independent claims 11 and 20 and their dependent claims.

The cited references, taken alone or in hypothetical combination, fail to teach or suggest features recited by independent claim 25.

Amended independent claim 25 recites, *inter alia*, “the fan housing comprises a top that extends crosswise over the pair of finger guards and overhangs the flow path outside the pair of finger guards.”

The cited references, taken alone or in hypothetical combination, fail to teach or suggest the foregoing features of independent claim 25. In rejecting independent claim 25 under 35 U.S.C. § 103, the Examiner failed to address how the cited references teach or suggest an overhanging top piece of the fan housing. Moreover, Applicants find no mention of such an overhanging top piece of the fan housing in any of the cited references. Although Applicants do not intend or suggest that the specification should be read into the claims, Applicants submit that the specification provides context to the present claim language. For example, Applicants’ specification discloses:

As illustrated in FIG. 4, a gap 90 is provided between the impellers 72 of the two fans to enable the air 58 to stabilize before it enters the second fan 46, reducing air resistance further. As noted above, the amount of audible noise generated is reduced by reducing the resistance to air flow. The top 88 of each fan housing 70 has an overhang 92 that covers the gap 90 between the first fan 44 and the second fan 46 to prevent air from being diverted into the server 20, rather than to the second fan 46. Preferably, the impeller 72 of the idle fan is able to spin freely. The resistance to the flow of air of a non-operating fan is greater when the impeller 72 is locked than it is when the impeller 72 is able to spin freely.

See Application, FIG. 4; paragraph [0020] (emphasis added). Again, the cited references are clearly missing the “the fan housing comprises a top that extends crosswise over the pair of finger guards and overhangs the flow path outside the pair of finger guards,” as recited by claim 25. In view of these deficiencies among others, the cited references, taken alone or in hypothetical combination, cannot render obvious the current independent claim 25 and its dependent claims.

For at least these reasons, among others, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103.

Lack of Evidence to Combine the References

In addition, the Examiner has not shown objective evidence of the requisite motivation or suggestion to modify or combine the cited references to reach the present claims. As summarized above, the *KSR* court did not diminish the requirement for objective evidence of obviousness. *KSR*, *slip op.* at 14 (“To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”); *see also*, *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002) (holding that the factual inquiry whether to combine references must be thorough and searching, and that it must be based on *objective evidence of record*). In the present rejection, the Examiner combined the cited references based on *conclusory and subjective statements without any articulated reasoning or rational underpinning*. Accordingly, Applicants respectfully request the Examiner to produce *objective evidence* of the requisite motivation or suggestion to combine the cited references, or remove the foregoing rejection under 35 U.S.C. § 103.

Improper Hindsight Reconstruction

The Examiner's rejections also appear to be based on hindsight reconstruction. Referring to the rejections summarized above, the Examiner's rejections are based on combinations of two references, three references, four references, five references, and even six references in some cases. The Examiner appears to be picking and choosing among various prior art references without regard to the requisite obviousness of making such combinations. Instead, the Examiner appears to be using Applicant's disclosure and claims as a guide for hindsight reconstruction of the present claims. This hindsight reconstruction is clearly improper and cannot be used to formulate rejections under Section 103.

As discussed above, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not, "fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *In re Dembiczak*, F.3d 994, 999, 50 U.S.P.Q.2d 52 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)).

For at least this additional reason, Applicants respectfully stress that the present rejections (particularly rejections numbered 6, 8, 9, 10, and 11) are based on improper hindsight reconstruction and must be withdrawn.

New Claims

As noted above, Applicants hereby add new claims 30-34. These new claims add no new matter and are fully supported in Applicants' specification. In particular, new independent claim 34 recites claimed features discussed in detail above with respect to independent claims 1, 11, 20, and 25.

Conclusion

Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

Date: April 7, 2008

/Tait R. Swanson/
Tait R. Swanson
Registration No. 48,226
(281) 970-4545

HEWLETT-PACKARD COMPANY

Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400